

AD-A215 335

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503</small>			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE Jul 84	3. REPORT TYPE AND DATES COVERED 1 Aug 83-30 Jul 84	
4. TITLE AND SUBTITLE A COMBINED XPS-MODULATED MOLECULAR BEAM INVESTIGATION OF REACTIONS OF OXYGEN & FLUORINE WITH SILICON ACES		5. FUNDING NUMBERS 61102F 2917/A2	
6. AUTHOR(S) Dr. Thomas Engel			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) University of Washington Department of Chemistry Seattle, WA 98195		8. PERFORMING ORGANIZATION REPORT NUMBER AFOSR-83-0327	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) AFOSR BLDG 410 BAFB DC 20332-6448		10. SPONSORING/MONITORING AGENCY REPORT NUMBER AFOSR-83-0327	
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION/AVAILABILITY STATEMENT		12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) DTIC ELECTE DEC 06 1989 D O D			
14. SUBJECT TERMS		15. NUMBER OF PAGES 4	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT

NSN 7540-01-280-5500

Standard Form 298 (890104 Draft)
Prescribed by ANSI Std. Z39-18
298-01

83 12 04 169

FINAL REPORT

A COMBINED XPS-MODULATED MOLECULAR BEAM INVESTIGATION OF
THE REACTIONS OF OXYGEN & FLUORINE WITH SILICON ACES

AFOSR-83-0327

AFOSR-83-0327

DR. THOMAS ENGEL
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF WASHINGTON
SEATTLE, WA 98195

1 August 1983 - 30 July 1984

Final Report Grant AFOSR 83-0327

The equipment purchased with this instrumentation grant has been used to equip an ultrahigh vacuum molecular beam - surface scattering apparatus with surface spectroscopy components as well as a number of electronic and vacuum components needed to carry out the experiments. These experiments which were described in the initial proposal are currently being funded under AFOSR grant 84-NC-029.

All items have been delivered and nearly all are currently in use. The surface spectroscopy components have only been delivered recently and we are awaiting a demonstration of the guaranteed specifications before these items are put into use. The enclosed figure shows a view of the apparatus on which the instrumentation grant components have been installed in its present state. It is anticipated that initial experiments on silicon etching reactions can be carried out within six months.

Accession For	
NTIS Grant	✓
DTIC TAB	
Unannounced	
Justification	
By	
Date	
A-1	



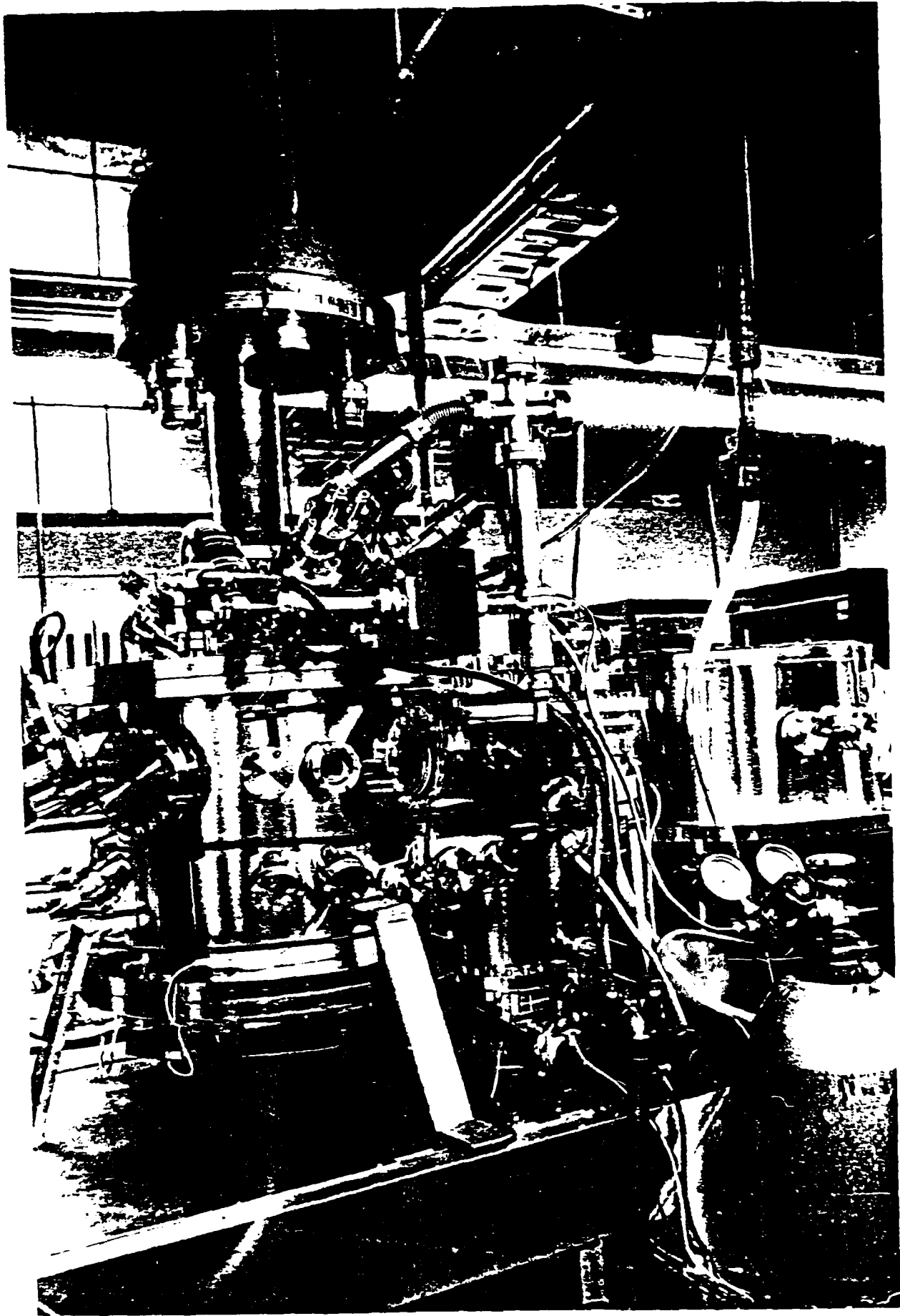


Figure 1